

STATEMENT OF BASIS

as required by LAC 33:IX.2411, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0100846; A141965; PER20080001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Jefferson Parish Department of Sewerage
Rosethorne Wastewater Treatment Plant
1221 Elmwood Park Blvd., Suite 803
Jefferson, LA 70123
- II. **PREPARED BY:** Darlene Bernard
- DATE PREPARED:** April 23, 2009
- III. **PERMIT ACTION:** Reissue LPDES permit LA0100846, A141965
LPDES application received: August 4, 2008
- LPDES permit effective: March 1, 2004
LPDES permit expired: February 28, 2009
EPA has not retained enforcement authority

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Jean Lafitte.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at 865 Jean Lafitte Blvd. in Lafitte, Jefferson Parish.
- D. The treatment facility consists of an Extended Aeration Treatment Plant with activated sludge basin using fine bubble diffusers with an integral clarifier for sludge separation. Disinfection is by calcium hypochlorite.
- E. Outfall 001
- Discharge Location: Latitude 29°45'40" North
Longitude 90°06'12" West
- Description: treated sanitary wastewater
- Design Capacity: 0.35 MGD

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Type of Flow Measurement which the facility is currently using:

Totalizing Meter

V. RECEIVING WATERS:

The discharge is into Bayou Barataria in segment 020601 of the Barataria Basin. Segment 020601 of the Barataria Basin is listed as impaired for Fecal Coliform. The TMDL was scheduled for completion on March 31, 2004. However, to date no TMDLs have been finalized for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL.

Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit.

The designated uses and degree of support for Segment 020601 of the Barataria Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 020601	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supporting	Full	Full	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 020601 of the Barataria Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Volume 5, Part B, Water Quality Inventory respectively.

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VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 020601 of the Barataria Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

The public notice is published in a local paper of general circulation and the Office of Environmental Services Public Notice Mailing List.

For additional information contact:

Darlene Bernard
Permits Division
Department of Environmental Quality
Office of Environmental Services
PO Box 4313
Baton Rouge, LA 70821-4313

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IX. PROPOSED PERMIT LIMITS:

The previous permit contained reporting requirements for Ammonia-Nitrogen. These reporting requirements were for informational gathering purposes because the receiving waterbody was listed as impaired for nutrients. However, since the issuance of the previous permit, the nutrient impairment has been removed. Therefore, the reporting requirement for Ammonia-Nitrogen has been removed from the permit.

Final Effluent Limits:**OUTFALL 001**

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	29.2	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.
TSS	43.8	15 mg/l	23 mg/l	Since there are no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

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Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml.

Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X.**PREVIOUS PERMITS:**

LPDES Permit No LA0100846:	Issued:	February 3, 2004
	Effective:	March 1, 2004
	Expired:	February 28, 2009

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (Design 0.35 MGD)

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform	200	400	2/month	Grab
pH	6-9 Standard Units		2/month	Grab

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XI.

ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of EDMS indicates the following inspections were performed for this facility:

Date – September 23, 2008

Findings and/or Violations:

A Hurricane Assessment Inspection was conducted to assess damages to the wastewater treatment plant from Hurricane Ike. The treatment plant was out of service from September 13-23, 2008 due to flooding and Entergy electrical power outages. Once power was restored, the plant started working partially at that time, however, the flooding had damaged the plant's small electrical transformer, the electrical panel, and some of the pump controls. Damages to equipment at the plant are currently being assessed and repairs are being handled on an emergency basis. The plant is operating with influent, effluent, and disinfection.

Date – September 8, 2008

Findings and/or Violations:

A Hurricane Assessment Inspection was conducted to assess damages to the wastewater treatment plant from Hurricane Gustav. The plant was operating. There was no apparent hurricane damage. The facility had minor flooding and has been pumped out.

B) Compliance and/or Administrative Orders

A review of EDMS revealed that there are no recent enforcement actions administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 1, 2007 to December 31, 2008 has revealed the following violations:

Date	Parameter	DMR Reported Value	Permit Limit
01-07	TSS, Monthly Avg.	17 mg/l	15 mg/l
02-07	TSS, Monthly Avg.	16 mg/l	15 mg/l
03-07	CBOD ₅ , Monthly Avg.	12 mg/l	10 mg/l
	TSS, Monthly Avg.	19 mg/l	15 mg/l
	TSS, Weekly Avg.	26 mg/l	23 mg/l

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Date	Parameter	DMR Reported Value	Permit Limit
04-07	CBOD ₅ , Monthly Avg.	15 mg/l	10 mg/l
	TSS, Monthly Avg.	29 mg/l	15 mg/l
	TSS, Weekly Avg.	30 mg/l	23 mg/l
05-07	CBOD ₅ , Monthly Avg.	13 mg/l	10 mg/l
	TSS, Monthly Avg.	18 mg/l	15 mg/l
06-07	CBOD ₅ , Monthly Avg.	12 mg/l	10 mg/l
	TSS, Monthly Avg.	26 mg/l	15 mg/l
	TSS, Weekly Avg.	27 mg/l	23 mg/l
07-07	CBOD ₅ , Monthly Avg.	13 mg/l	10 mg/l
	TSS, Monthly Avg.	32 mg/l	15 mg/l
	TSS, Weekly Avg.	34 mg/l	23 mg/l
08-07	CBOD ₅ , Monthly Avg.	14 mg/l	10 mg/l
	CBOD ₅ , Weekly Avg.	17 mg/l	15 mg/l
	TSS, Monthly Avg.	23 mg/l	15 mg/l
	TSS, Weekly Avg.	24 mg/l	23 mg/l
09-07	CBOD ₅ , Monthly Avg.	14 mg/l	10 mg/l
	TSS, Monthly Avg.	16 mg/l	15 mg/l
10-07	CBOD ₅ , Monthly Avg.	13 mg/l	10 mg/l
	TSS, Monthly Avg.	25 mg/l	15 mg/l
	TSS, Weekly Avg.	28 mg/l	23 mg/l
12-07	TSS, Monthly Avg.	29 mg/l	15 mg/l
	TSS, Weekly Avg.	34 mg/l	23 mg/l
01-08	CBOD ₅ , Monthly Avg.	14 mg/l	10 mg/l
	CBOD ₅ , Weekly Avg.	16 mg/l	15 mg/l
02-08	CBOD ₅ , Monthly Avg.	11 mg/l	10 mg/l
03-08	CBOD ₅ , Monthly Avg.	12 mg/l	10 mg/l
	TSS, Monthly Avg.	25 mg/l	15 mg/l
	TSS, Weekly Avg.	26 mg/l	23 mg/l
04-08	CBOD ₅ , Monthly Avg.	23 mg/l	10 mg/l
	CBOD ₅ , Weekly Avg.	26 mg/l	15 mg/l
	TSS, Weekly Avg.	30 mg/l	23 mg/l
06-08	CBOD ₅ , Monthly Avg. (lbs/day)	48 lbs/day	29.2 lbs/day
		43 mg/l	10 mg/l
	CBOD ₅ , Monthly Avg.	71 mg/l	15 mg/l
	CBOD ₅ , Weekly Avg.	19 mg/l	15 mg/l
	TSS, Monthly Avg.	24 mg/l	23 mg/l
07-08	TSS, Weekly Avg.		
	CBOD ₅ , Monthly Avg.	14 mg/l	10 mg/l
08-08	CBOD ₅ , Monthly Avg. (lbs/day)	30 lbs/day	29.2 lbs/day
		22 mg/l	10 mg/l
	CBOD ₅ , Monthly Avg.	32 mg/l	15 mg/l
	CBOD ₅ , Weekly Avg.	24 mg/l	15 mg/l
	TSS, Monthly Avg.	30 mg/l	23 mg/l
	TSS, Weekly Avg.		

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Date	Parameter	DMR Reported Value	Permit Limit
09-08	CBOD ₅ , Monthly Avg. (lbs/day)	45.7 lbs/day	29.2 lbs/day
	CBOD ₅ , Monthly Avg.	33 mg/l	10 mg/l
	CBOD ₅ , Weekly Avg.	28 mg/l	15 mg/l
	TSS, Monthly Avg.	26 mg/l	15 mg/l
	TSS, Weekly Avg.	27 mg/l	23 mg/l
10-08	CBOD ₅ , Monthly Avg.	31 mg/l	10 mg/l
	CBOD ₅ , Weekly Avg.	34 mg/l	15 mg/l
	TSS, Monthly Avg.	27 mg/l	15 mg/l
	TSS, Weekly Avg.	28 mg/l	23 mg/l
11-08	CBOD ₅ , Monthly Avg.	42 mg/l	10 mg/l
	CBOD ₅ , Weekly Avg.	51 mg/l	15 mg/l
	TSS, Monthly Avg.	66 mg/l	15 mg/l
	TSS, Weekly Avg.	76 mg/l	23 mg/l
12-08	CBOD ₅ , Monthly Avg. (lbs/day)	66 lbs/day	29.2 lbs/day
	CBOD ₅ , Monthly Avg.	51 mg/l	10 mg/l
	CBOD ₅ , Weekly Avg.	51 mg/l	15 mg/l
	TSS, Monthly Avg. (lbs/day)	55 lbs/day	43.8 lbs/day
	TSS, Monthly Avg.	46 mg/l	15 mg/l
	TSS, Weekly Avg.	52 mg/l	23 mg/l

XII. ADDITIONAL INFORMATION:

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.35 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ gal/lb} \times 0.35 \text{ MGD} \times 10 \text{ mg/l} = 29.2 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Effluent Characteristics

Flow
BOD₅
Total Suspended Solids
Fecal Coliform Bacteria
pH

Monitoring Requirements

<u>Measurement</u>	<u>Sample</u>
<u>Frequency</u>	<u>Type</u>
Continuous	Recorder
2/month	Grab
2/month	Grab
2/month	Grab
2/month	Grab

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Pretreatment Requirements

The Jefferson Parish Department of Sewerage has an approved pretreatment program. LDEQ Option 2A Pretreatment Language has been placed in the permit.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. Please make additional copies to be utilized for each year of this permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan, Vol. 10, "Wasteload Allocations and Discharger Inventory", Louisiana Department of Environmental Quality, 1992.

Louisiana Water Quality Management Plan, Vol. 5-B, "Water Quality Inventory", Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 1999.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 23 - "The LPDES Program", Louisiana Department of Environmental Quality, 1999.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Jefferson Parish Department of Sewerage, Rosethorne Wastewater Treatment Plant, August 4, 2008.